1.(Currently Amended) An electric motor which comprises:

a stator (28) having a polyphase stator winding;

a rotor (36; 36'; 36''), separated from the stator (28) by an air gap (39);

said rotor having, on its side facing away from the air gap, a yoke made of magnetically conductive material,

and having, on its side facing the air gap (39, a plurality of salient poles with pole shoes (260A, 260B, 260C, 260D; 292A, 292B, 292C, 292D) serving to generate, in operation, sinusoidal induced voltages (Uind) in the polyphase stator winding;

a respective recess (266A, 266B, 266C, 266D) being provided between the magnetic yoke (200) and each pole shoe (260A, 260B, 260C, 260D; 292A, 292B, 292C, 292D), in which recess at least one permanent magnet (262A, 262B, 262C, 262D; 290A, 290B, 290C, 290D) is arranged.

said permanent magnet having two poles, one pole thereof facing the adjacent pole shoe and defining a pole shoe boundary,

and the other pole thereof facing the yoke and defining a yoke boundary.

said recess being adjoined, approximately in the circumferential direction and on each circumferential side thereof, by a respective low magnetic conductivity region;

such a low magnetic conductivity region being bounded, on its side facing toward the air gap (39), by a retaining segment (270' 270") made of ferromagnetic material and serving to mechanically connect the pole shoe (260A, 260B, 260C, 260D; 292A, 292B, 292C, 292D to the magnetic yoke;

and at least one flow path element (274', 274", 290; 292; 296A) made of ferromagnetic material and extending

from a source region (264A; 298A) of the at least one permanent magnet 262A, 262B, 262C, 262D; 290A, 290B, 290C, 290D) which source region is closer to the pole shoe boundary of the magnet than to the yoke boundary thereof, and

through the low magnetic conductivity region adjacent to the source region, to a target region (270''') of the retaining segment (270', 270") adjacent to said respective low magnetic conductivity region, in order to conduct, towards said target region (270'''), an additional magnetic flux from the respective permanent magnet (262A, 262B, 262C, 262D).

~~a stator (28) having a polyphase stator winding;~~

~~a rotor (36, 36', 36''), separated from the stator (28) by an air gap (39), which has on its side facing toward the air gap a plurality of salient poles with pole shoes (260A, 260B, 260C, 260D, 292A, 292B, 292C, 292D) facing the air gap (39) and, on its side facing away from the air gap, a magnetic yoke (200), whose pole shoes (260A, 260B, 260C, 260D, 292A, 292B, 292C, 292D) serve to generate a sinusoidal induced voltage (u_{ind}) in the stator winding;~~

~~a recess (266A, 266B, 266C, 266D), provided between the magnetic yoke (200) and a pole shoe (260A, 260B, 260C, 260D, 292A, 292B, 292C, 292D), in which at least one permanent magnet (262A, 262B, 262C, 262D, 290A, 290B, 290C, 290D) is arranged, which recess (266A, 266B, 266C, 266D) is adjoined on each side of the at least one permanent magnet (262A, 262B, 262C, 262D, 290A, 290B, 290C, 290D), approximately in the circumferential direction, by a low magnetic conductivity region that adjoins, on its side facing toward the air gap (39), a retaining segment (270', 270'') made of ferromagnetic material, which segment serves to connect the pole shoe (260A, 260B, 260C, 260D, 292A, 292B, 292C, 292D) mechanically to the magnetic yoke; and~~

~~at least one magnetic shunt (274', 274'', 290, 292, 296A) that extends from a source segment (264A', 298A), located closer to the air gap (39), of the at least one permanent magnet (262A, 262B, 262C, 262D, 290A, 290B, 290C, 290D), through a low magnetic conductivity region adjacent to that segment, to a target region (270''') of the relevant retaining segment (270', 270'') in order to inject at that target region (270''') an additional magnetic flux from that permanent magnet (262A, 262B, 262C, 262D).~~

2. (Currently Amended) The electric motor according to claim 1, wherein

the magnetic yoke (200) of the rotor (36'; 36''), ~~its~~ <u>the</u> pole shoes (260A, 260B, 260C, 260D; 292A, 292B, 292C, 292D), the retaining segments (270', 270''), and the ~~magnetic shunts~~ <u>flow path elements</u> (274', 274''; 290; 292; 296A) are formed as laminations (116) of a lamination stack.

3. (Original) The electric motor according to claim 2,

wherein, in order to produce a low magnetic conductivity region at the relevant location, at least one recess (266A'; 294A', 294A'') is formed in the laminations.

4. (Original) The electric motor according to claim 1,

wherein the retaining segments (270', 270'') made of ferromagnetic material are, during operation, at least locally substantially magnetically saturated.

5. (Currently Amended) The electric motor according to claim 1,

wherein a ~~magnetic shunt~~ flow path element (274', 274''; 290; 292) extends to a target region (270''') that is connected to the relevant pole shoe (260A, 260B, 260C, 260D; 292A, 292B, 292C, 292D) via a part (270') of the retaining segment that is at least locally saturated during operation.

6. (Currently Amended) The electric motor according to claim 1,

wherein a ~~magnetic shunt~~ flow path element (274', 274''; 290; 292) extends to a target region (270''') that is connected to the magnetic yoke (200) via a part (270'') of the retaining segment that is at least locally saturated during operation.

7. (Currently Amended) The electric motor according to claim 1,

wherein the at least one permanent magnet (262A, 262B, 262C, 262D) has, on its pole shoe boundary, a beveled edge ~~side located closer to the air gap (39) and~~ facing toward an adjacent low magnetic conductivity region.

~~a beveled edge (264A', 264A'', ...) which forms a beveled interface of that permanent magnet (262A, 262B, 262C, 262D).~~

8. (Currently Amended) The electric motor according to claim 7, wherein the ~~magnetic shunt~~ flow path element (274', 274'') extends substantially from that beveled ~~interface~~ edge ~~(264A', 264A'', ...)~~ to the target region ~~(270''')~~.

9. (Currently Amended) The electric motor according to claim 7, wherein the pole shoe boundary (260A, 260B, 260C, 260D) extends over ~~covers~~ at least a part of the beveled ~~interface~~ edge. ~~(264A', 264A'', ...)~~.

10. (Currently Amended) The electric motor according to claim 1, wherein the at least one permanent magnet (290A; 290A') has, on its side facing toward ~~a~~ an associated low magnetic conductivity region ~~associated with it~~, a cross section whose ~~lateral~~ circumferential boundary transitions substantially orthogonally into said pole shoe boundary ~~an interface of that permanent magnet (262A; 262B, 262C; 262D) facing toward the pole shoe (260A, 260B, 260C, 260D)~~ thereof,

and the ~~magnetic shunt~~ flow path element (296A) extends from ~~a~~ said source region ~~(298A), located closer to the air gap (39),~~ of that ~~lateral~~ circumferential boundary through the low magnetic conductivity region to the target region (270''') of the retaining segment.

11. (Currently Amended) The electric motor according to claim 10, wherein the pole shoe (260A, 260B, 260C, 260D) extends beyond the ~~lateral~~ circumferential boundary.

12. (Original) The electric motor according to claim 1, wherein a ratio, of the width of a rotor magnet (214; 262; 290A) to the pole pitch of the relevant rotor pole (206), is selected so as to minimize generation of any cogging torque.

13. (Currently Amended) The electric motor according to claim 1,

wherein the average angular extent ~~extension (beta)~~ of a rotor magnet (214; 262, 290) is approximately 115 ~~to 135° el~~ to 135 electrical degrees.

14. (Currently Amended) A method of influencing the shape of the induced ~~voltage~~ voltages (u_{ind}) of an electronically commutated electric motor having:

a stator 28 having a polyphase winding and

a rotor separated from the stator by an air gap (39);

said rotor having, on its side facing the air gap, a plurality of salient poles with pole shoes serving to generate, in operation, said induced voltages in the polyphase winding;

a respective recess (266A, 266B, 266C, 266D) being provided between the magnetic yoke (200) and each pole shoe (260A, 260B, 260C, 260D; 292A, 292B, 292C, 292(D), in which recess at least one permanent magnet (262A, 262B, 262C, 262D; 290A, 290B, 290C, 290D) is arranged;

said permanent magnet having two poles,

one pole thereof facing the adjacent pole shoe and defining a pole shoe boundary, and the other pole thereof facing the yoke and defining a yoke boundary;

said recess being adjoined, approximately in the circumferential direction and on each circumferential side thereof, by a respective low magnetic conductivity region that is bounded, on its side facing toward the air gap (39), by a retaining segment (270', 270"") made of ferromagnetic material and serving to mechanically connect the respective pole shoe (260A, 260B, 260C, 260D; 292A, 292B, 292C, 292D) to the magnetic yoke:

said voltage-shape-influencing method comprising the step of:

injecting an additional magnetic flux from an adjacent permanent magnet (262A, 262B, 262C, 262D), through the low magnetic conductivity region, into a respective retaining segment at a respective target region (270''') thereof.

~~having a rotor and several pole shoes,~~

~~wherein the rotor (36', 36'') comprises, between its pole shoes (260A, 260B, 260C, 260D, 292A, 292B, 292C, 292D) and its magnetic yoke (200), pockets into which permanent magnets (262A, 262B, 262C, 262D) are inserted, and adjacent to those pockets, viewed in the circumferential direction, are located low magnetic conductivity zones that are delimited, in the direction toward the air gap (39), by lands that work during operation substantially in a region of magnetic saturation,~~

~~comprising the step of:~~

~~injecting an additional magnetic flux from an adjacent permanent magnet (262A, 262B, 262C, 262D), through the low magnetic conductivity zone, into respective lands at a respective target region (270''').~~

15. (Currently Amended) The method according to claim 14, further comprising

injecting said magnetic flux into a target region (270''') that lies approximately in a center part of the relevant <u>retaining segment</u> ~~land~~ (270', 270'').

16. (Currently Amended) The method according to claim 14, further comprising

injecting said magnetic flux into a target region (270''') of the relevant <u>retaining segment</u> ~~land~~ (270', 270'') that lies in the vicinity of a pole boundary (271) ~~with~~ <u>between the respective pole and</u> an adjacent rotor pole.

17. (Currently Amended) The method according to claim 14, further comprising

injecting said additional magnetic flux from a region of the permanent magnet (262A, 262B, 262C, 262D) adjacent to the <u>pole shoe boundary,</u> ~~air gap (39),~~ through a ~~magnetic shunt~~ <u>ferromagnetic flow path element</u> (274', 274''; 290; 292) in the interior of the rotor (36'; 26''), into the target region (270''').

18. (Currently Amended) The method according to claim 15, further comprising

injecting said additional magnetic flux from a region of the permanent magnet (262A, 262B, 262C, 262D) adjacent to the <u>pole shoe boundary,</u> ~~air gap (39),~~ through a ~~magnetic shunt~~ <u>ferromagnetic flow path element</u> (274', 274''; 290; 292) in the interior of the rotor (36'; 26''), into the target region (270''').

19. (Currently Amended) The method according to claim 16, further comprising

injecting said additional magnetic flux from a region of the permanent magnet (262A, 262B, 262C, 262D) adjacent to the pole shoe boundary, ~~air gap (39),~~ through a ~~magnetic shunt~~ ferromagnetic flow path element ~~(274', 274'', 290, 292)~~ in the interior of the rotor (36'; 26''), into the target region ~~(270''')~~.